May 22, 2001

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Mr. William F. Lowe
RCRA Corrective Action & Permits Branch
Air, RCRA and Toxics Division
U.S. Environmental Protection Agency
Region VII
901 North 5th Street
Kansas City, KS 66101

Re: Response to Comments
Safety-Kleen (Wichita), Inc. Facility
2549 North New York Avenue
Wichita, KS 67219
EPA Identification No. KSD007246846

Dear Mr. Lowe:

This letter responds to comments presented in your letter dated March 6, 2001, regarding the review of the Quality Assurance Project Plan (QAPP) included in the RFI Phase I Work Plan for the Safety-Kleen (Wichita), Inc. (SKW) facility located in Wichita, Kansas. The subject document was dated October 14, 1999 and outlined a scope of work that focused on initial soil and groundwater sampling to identify potential releases from select Phase I solid waste management units (SWMUs) and areas of concern at the SKW facility. Safety-Kleen Consulting (SKC) has prepared this correspondence on the behalf of SKW.

The italicized text below presents the EPA's comments and our responses follow. If these proposed changes meet with your approval, then we recommend that this letter and the associated tables and attachments act as an amendment to the Work Plan and modify the QAPP accordingly.

General
Response: Since EPA and KDHE have previously approved the RFI Work Plan for the S-K Wichita facility (which includes a quality assurance presentation in Section 7.0), your comments are viewed as suggestions to improve the existing RFI Work Plan. Furthermore, the procedures followed in the RFI work conducted to date meets the requirements of our approved work plan and the improvements stated herein. The proposed changes made are primarily to correct oversights not previously noted by the agencies or SKC, and/or the addition of details to clarify certain items. SKC has addressed the suggested changes on a point-by-point basis below. Also attached to address the comments on the QAPP are the following items:

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- A distribution list;
- A signature page;
- A revised analytical methods table (Table 5);
- A new groundwater protection pathway table with risk-based standards (Table 6);
- A list of personnel and the project roles (Table 7);
- Two new SOPs requested (for use of the OVM and soil sampling);
- A Table of Contents for Appendix G; and,
- An QAPP for the laboratory equipment/procedures.

These comments and attachments should replace and append the existing Work Plan text, as appropriate. The Work Plan figures did not require revisions.

1. *Table 5: Soil samples according to the SW-846 Methods, Chapter 3, Methods 6000-7000 do not require acidification as a preservation. However, water samples for manganese do require acidification. The reason for acidifying the soil samples but not the water samples should be clarified.*

Response: The reference to acid preservation of soils in Table 5 is incorrect. The table should state that soil samples are to be chilled upon collection to 4 degrees Celsius. Water samples for manganese analysis should be acidified. Dissolved manganese samples should be field filtered prior to acidification. These discrepancies, and some others not noted (i.e., holding time for hexavalent chromium and mercury) have been corrected in an updated Table 5 (attached).

2. *Section 1, page 2 (R5-B9): This section references historical data. The QAPP should explain how this data would be used for decisions within the RFI. The historical data in Appendix E do not appear to have sufficient information to evaluate the quality of the results for the project. Specifically:*

    1. *Were the methods used for the analyses during the 1986-1990 period the same as the analyses during the 1994-1997 period?*

    2. *What were the method detection limits (MDLs) for each analysis?*

    3. *What were the surrogate recoveries for the monitoring wells, and the data collected prior to 1994?*

    4. *What were the acceptance criteria for the data presented in the appendix?*

    5. *Why were analyte data not consistently collected for each location?*

6. *Will the data be comparable to the current activities? If not, then what is the impact upon the project?*

Response: The data presented in Appendix E were collected as part of the CERCLA RI/FS investigation for the North Industrial Corridor (NIC) site. These data were collected by others under work plans approved by the KDHE and placed in a database by Camp Dresser McKee. We therefore consider that the methods used were those required to produce the highest possible quality data in accordance with CERCLA requirements. These data were provided in the appendices of our RFI Work Plan for the following reasons: 1) To provide a "big picture" overview of some of the NIC data issues; 2) Because they were the only significant data available on or near our site at the time the Work Plan was written; and 3) To assess general groundwater quality trends in the site vicinity. Therefore, we do not believe it is necessary to perform additional validation of these historical data.

3. *Section 3.5.3, page 11: In the second paragraph the plan describes water levels being less than 10 feet, while in the fourth paragraph Safety-Kleen predicts water levels from 12-14 feet. This discrepancy should be corrected.*

Response: The referenced depth to water of 10 feet is from a PRC document and includes water level measurements obtained from the SKW facility and surrounding properties. The depth to water value of 12-14 feet is specific to the SKW facility, and is based on actual monitoring well depth to water measurements by SKC. Differences in topography across the site and vicinity account for variances in the depth to water measurement.

4. *Section 6.2, page 30: This section states "...soil impacts will be compared to levels that are protective of groundwater based on USEPA and/or KDHE guidelines." Provide a table which has the soil to groundwater screening limits. Make sure that the analytical MDLs are below the groundwater protection limits.*

Response: See Table 6 (attached) which provides method detection limits, KDHE groundwater protection standards, and Region IX Preliminary Remedial Goals (PRGs). A comparison of the analytical MDLs to these protective standards indicates that they are below the applicable groundwater protection standards.

5. *Section 6.3, page 30: The second bullet discussed coding outlier data. Table 4 lists the samples, most of which are biased. Define a "statistical outlier" with biased data. EPA QA/G-9, the guidance on data quality assessment indicates that elimination of outliers from biased data severely skews the results.*

Response: The discussion of outlier results is not particularly appropriate for the sampling program targeted to identify source areas (biased sampling). SKC has no intention of eliminating representative analytical data obtained during this investigation based solely on the use of a targeted sampling approach.

6. *Section 7.1.7, page 36: This section describes only one field instrument, the PID for VOC determination. There is no SOP for this instrument. Additionally, other field tests are planned which are not described in this section, such as meters for temperature, pH, conductivity, and dissolved oxygen. Add a SOP for PID screening as well as discussion of the other field-testing methods.*

Response: SKC field team members operate each of the field instruments noted above according to instrument manufacturers specifications. If periodic calibration of the field instruments are required, a record of the associated calibration procedure is noted in bound project-specific field logbooks. Several detailed SOPs for field instrument procedures are included in Appendix G (Standard Operating Procedures) of the Work Plan. These SOPs typically cover specific field techniques which utilize various instruments (i.e., the use of the OVM/PID to monitor headspace VOCs), not basic instrument operation. An SOP (attached) should be added to Appendix G to detail operation and calibration of the organic vapor monitor (OVM) instrument.

Also provided is a table of contents for the SOPs in Appendix G, including those attached to this letter.

7. *Section 7.1.8, page 37: This section states that "duplicate samples are primarily for inorganic analysis." This statement appears to be inconsistent with guidance documents. Duplicate samples are for all analyses when determining the problem for precision is matrix related. Explain/justify this apparent discrepancy.*

Response: The text should have stated that field duplicates are collected to assess matrix homogeneity, and also reflect combined precision of field sample collection methods and laboratory analytical methods. The reference to inorganic analyses was incorrect. Duplicate groundwater samples collected at the site have been tested for the full suite of analytes.

8. *Section 7.2.1, page 38: There is a good description of the types of QC samples for the analytical methods. However, the plan should include the frequency at which these QC samples will be analyzed.*

Response: The last sentence under the description of surrogate recoveries states that laboratory QC samples will be analyzed at the frequency stipulated by the SW-

846 methods. The laboratory QC analyses discussed in Section 7.2.1 are all to be analyzed on a batch specific frequency, with the exception of surrogates, which are analyzed with every organic sample (organic analyses involving gas chromatography).

9. *Appendix G: This section appears to be missing SOPs for the collection of soil samples from the borehole locations and there is no SOP for the field PID.*

Response: As previously noted, a new SOP for operation of the OVM will be added to Appendix G. Soil sample collection is described in the attached SOP.

10. *Section 1 (R5-A1, QAMS-1.0): There is no signature of the project manager, and there is no indication that a quality assurance officer/manager exists. Signatures show acceptance of the document by all participants. If there are any legal requirements relative to EPA, EPA should also have signatures for the EPA Project Manager and the Regional Quality Assurance Manager.*

Response: A signature page has been created and is enclosed for the RFI Phase I Work Plan. SKC has identified a Quality Assurance (QA) officer (Mr. Kenneth Vogler, P.E.) for the project. The QA officer will be added to the signature page.

11. *Section 4 (R5-A4, QAMS-3.0): Key individuals are identified. However, no distribution list exists for those people who would receive the document and subsequent updates. There is no quality assurance officer/manager; there is no evidence of an independent review of the data.*

Response: A distribution list page has been prepared and attached to this document. As previously noted, a QA officer has been identified (Mr. Kenneth Vogler, P.E.). SKC utilizes a procedure where an independent contractor (Mr. William Huskie, Geochemist), performs data validation as part of the current and future data evaluation process.

12. *Section 3 (R5-A6, QAMS-3.0): Applicable regulations are alluded to for the RCRA Facility Investigation, the USEPA Risk-based Levels, and the KDHE Risk-based levels. There are no details which allow the tracking of the specific portions of these regulations.*

Response: The regulatory framework for the RFI Work Plan is described in Section 1. KDHE and EPA Risk-based action levels are included in the new Table 6 (attached). The source and date of the risk-based action levels are identified on Table 6.

13. Section 6 (R5-C1 and D2, QAMS-12.0): This section indicates that the data will be reviewed. It is not clear for what it will be reviewed against when no criteria nor action limits appear to have been established or documented in this plan.

Response: Data will be initially reviewed against Federal MCLs and appropriate EPA and KDHE risk-based action levels provided in the attached Table 6. Criteria for selection of site-specific action levels have not been established at this early time in the investigation process. Additionally, data will be validated against EPA National Functional Guidelines for Review of Inorganic and Organic Analyses (current versions of these documents), as appropriate.

14. Section 7 (R5-A7, QAMS-5.0): The measurement quality objectives are described. However, the details relative to frequency and criteria appear to be missing, as do the action levels.

Response: As previously noted, the frequency for laboratory QC analyses is specified in the applicable EPA methods. Acceptance criteria for accuracy of laboratory control samples, surrogates, and matrix spikes are laboratory method derived, and are presented in the laboratory reports. Acceptance criteria for precision of MS/MSD recoveries, LCS/LCSD recoveries, and laboratory duplicates are similarly derived. Acceptance criteria for combined laboratory and field duplicate precision is set at 50% relative percent difference (RPD) for validation purposes.

15. Section 7 (R5-B6, B7, B8; QAMS-8.0, 13.0): The only location where instrument testing, inspection, and calibration are discussed are in the SOPs located in Appendix G. There is no discussion of these activities for the field PID instrument, nor for the analytical instruments.

Response: As previously noted, Appendix G will be revised to include an SOP for the PID operation and calibration. An SOP and quality assurance plan (QAP) for operation of applicable laboratory analytical equipment from Severn Trent Laboratory is enclosed.

16. *General: The only reference to responsible individuals is in Section 4.1 under the discussion of project personnel. It appears the project manager is responsible for everything, including well drilling, sample collection, and sample analysis. The project manager may be ultimately responsible for the final results; however, they may not be able to recommend corrective actions for specific activities, i.e., the VOC analysis or improper procedures for the drill. Additional personnel (by titles) should be described along with their responsibilities.*

Response: The attached Table 7 provides the specific personnel who will fill the roles of field operations manager, quality assurance officer, risk assessment manager, health and safety officer, and data validation reviewer.

If you have questions or comments on this amendment to the RFI Work Plan, please contact Ms. Tauscher at (303) 938-5535.

Sincerely,

Kay L. Tauscher, C.P.G.
Project Manager/Hydrogeologist

Brian Martinek, P.G.
Senior Project Manager/Hydrogeologist

Attachments

Cc: Ms. Christine R. Jump, KDHE
Mr. Geoff Jones, S-K, Columbia, SC
Mr. John Arbuthnot, S-K, Baton Rouge, LA
Mr. Ron Robertson, S-K, Wichita, KS